
Testi del Syllabus

Resp. Did.	BERNARDIS PAOLO	Matricola: 009028
Docenti	BERNARDIS PAOLO, 4 CFU CHIANDETTI CINZIA, 1 CFU GERBINO WALTER, 2 CFU	
Anno offerta:	2016/2017	
Insegnamento:	894SM - NEUROSCIENZE COGNITIVE	
Corso di studio:	SM54 - NEUROSCIENZE	
Anno regolamento:	2015	
CFU:	7	
Settore:	M-PSI/02	
Tipo Attività:	C - Affine/Integrativa	
Anno corso:	2	
Periodo:	Primo Semestre	
Sede:	TRIESTE	



Testi in italiano

Lingua insegnamento

English

Contenuti (Dipl.Sup.)

PROGRAM: BERNARDIS PART (4ECTS): A brief summary of the brain structures, from the neuron to the highly specialized areas of the cortex. An extensive exposition of the cognitive neuroscience methods: electrophysiology, brain imaging, patients' studies, and transcranial magnetic stimulation. The main theories and findings in the fields of high- and low-level vision, space perception, human movement, mathematical abilities. The course (4ECTS) will be organized in two parts: 24 Hs of introductory theoretical lectures followed by students' presentation (8 Hs) of scientific papers. Each student will have to orally present to the class a scientific paper in the Journal club format. The papers will be chosen from a selection provided by the teacher during the course. Students are encouraged to use electronic presentations. Students, who didn't have the possibility to present the scientific paper (because abroad), must prepare a critical essay to send by email one week before the examination. For more information, contact the professor by email. The list of papers will be available during the course. GERBINO PART (2ECTS): Philosophy of perception, psychophysics, psychobiology of sensation and perception. Light and optic information. Spatial vision. Perception and recognition. Grouping and unit formation. Figure/ground articulation. Amodal completion. Object recognition. Face processing. Light, color and illumination. Color constancy. Space perception. Binocular vision. Combining depth cues. Motion perception. Structure from motion. Attention and scene perception. CHIANDETTI PART (1ECTS) - The focus will be on cerebral lateralization and plasticity.

Testi di riferimento

BERNARDIS PART (4ECTS): Jamie Ward. (2015). The Student's Guide to Cognitive Neuroscience. Psychology Press: NY. 3rd edition GERBINO PART (2ECTS): a) Wolfe, Kluender, Levi, Bartoshuk, Herz, Klatzky, Lederman & Merfeld (2015, 4th ed.). Sensation and Perception, Sinauer, chapters 1-8. In Italian, Sensazione e Percezione, Zanichelli, 2007 (1st ed.). English and

Italian editions available in the psychology library, via Weiss 4, P Building - San Giovanni, Trieste. Student website (referring to the 4th edition): <http://sites.sinauer.com/wolfe4e/> b) One chapter from the Handbook of Perceptual Organization (2015, J. Wagemans ed.). The following chapters are suggested: • Gerbino, Achromatic transparency • Gilchrist, Perceptual organization in lightness • van Lier & Gerbino, Perceptual completions • Vezzani, Kramer & Bressan, Stereokinetic effect, kinetic depth effect, and structure from motion Pre-print versions of all chapters are downloadable from <http://www.gestaltrevision.be/en/our-publications/handbook-of-perceptual-organization/chapters> CHIANDETTI PART (1ECTS) - 2 mandatory papers available on Moodle

Obiettivi formativi	AIMS BERNARDIS & CHIANDETTI PART: The aim is to provide a brain-based account of cognition, and a wide knowledge of the neuroscience methods. GERBINO PART: To provide a brain-based account of sensation and perception, and to develop practical knowledge of psychophysical methods.
Prerequisiti	none
Metodi didattici	BERNARDIS & GERBINO PART: theoretical lectures and workgroup CHIANDETTI PART: 4 lectures
Altre informazioni	- CHIANDETTI PART - visit Moodle for the pdf of the lectures and the mandatory papers
Modalità di verifica dell'apprendimento	BERNARDS PART: written examination and oral presentation GERBINO PART: Written part (70%): 30 closed questions (4 alternatives) and 4 open questions Oral part (30%): Presentation of a short empirical research, conducted individually, on a topic included in the program (typically, a reduced replica of an experiment described in the literature). Examples will be provided during lab activities. CHIANDETTI PART: written examination (one open-ended and one multiple choice question)
Programma esteso	-



Testi in inglese

Lingua insegnamento	English
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Prerequisiti

none

Metodi didattici

BERNARDIS & GERBINO PART: theoretical lectures and workgroup CHIANDETTI PART: 4 lectures

Altre informazioni

- CHIANDETTI PART - visit Moodle for the pdf of the lectures and the mandatory papers

Modalità di verifica dell'apprendimento

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Programma esteso

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